

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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Wireless Telecommunications Bureau)
Requests Targeted Comment on Wireless)
E911 Phase II Automatic Location)
Identification Requirements)

CC Docket 94-102
DA 99-1049

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

**COMMENTS OF THE PERSONAL
COMMUNICATIONS INDUSTRY ASSOCIATION**

The Personal Communications Industry Association ("PCIA"),¹ hereby respectfully submits its comments on the Commission's *Public Notice* in the above-captioned proceeding.² As described in greater detail below, the Commission should adopt flexible rules and implementation schedules for handset-based ALI solutions, should not require the retrofitting or replacement of existing handsets to make them ALI-capable, and should modify its ALI accuracy requirements in accordance with the recommendations of the Wireless E911 Implementation Ad Hoc Group ("WEIAD").

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List A B C D E

¹ PCIA is an international trade association established to represent the interests of the commercial and private mobile radio service communications industries and the fixed broadband wireless industry. PCIA's Federation of Councils includes: the Paging and Messaging Alliance, the PCS Alliance, the Site Owners and Managers Association, the Association of Wireless Communications Engineers and Technicians, the Private Systems Users Alliance, the Mobile Wireless Communications Alliance, and the Wireless Broadband Alliance. As an FCC-appointed frequency coordinator for the Industrial/Business Pool frequencies below 512 MHz, the 800 MHz and 900 MHz Business Pools, the 800 MHz General Category frequencies for Business Eligibles and conventional SMR systems, and the 929 MHz paging frequencies, PCIA represents and serves the interests of tens of thousands of FCC licensees.

² Public Notice, *Wireless Telecommunications Bureau Requests Targeted Comment on Wireless E911 Phase II Automatic Location Identification Requirements*, DA 99-1049 (rel. June 1, 1999) ("Notice").

I. INTRODUCTION

Section 20.18(e) of the Commission's rules requires covered CMRS carriers to provide public safety answering points ("PSAPs") with automatic location information ("ALI") accurate to 125 meters, root mean square ("RMS") for wireless customers dialing 9-1-1.³ This ALI must, however, only be provided under the following circumstances: (1) the PSAP administrator has requested ALI service and the PSAP is capable of receiving and utilizing the data elements associated with the service; and (2) a mechanism for recovering the costs of the service is in place.⁴ This ALI requirement is scheduled to become effective on October 1, 2001.⁵

Since promulgating Section 20.18(e), the Commission has recognized that the rule might discriminate against carriers choosing to satisfy this requirement through the use of handset-based, rather than network-based technologies.⁶ The Commission therefore encouraged carriers that were contemplating the use of a handset-based ALI solution to file requests for waiver of the October 1, 2001 deadline.⁷ As described in the instant *Notice*, a number of carriers filed such requests.⁸ The Commission now seeks to expand on the existing record regarding the provision of ALI through handset-based technology by requesting comment on the following specific issues: (1) whether to adopt standards for handset-based approaches similar to the proposals

³ 47 C.F.R. § 20.18(e).

⁴ 47 C.F.R. § 20.18(f).

⁵ 47 C.F.R. § 20.18(e).

⁶ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, 12 FCC Rcd 22665, 22725 (1997) ("E911 Reconsideration Order").

⁷ Public Notice, *Wireless Telecommunications Bureau Outlines Guidelines for Wireless E911 Rule Waivers for Handset-Based Approaches to Phase II ALI Requirements*, 13 FCC Rcd 24609 (1998).

⁸ *Notice* at 2.

suggested by SnapTrack or the Association of Public Safety Communications Officials (“APCO”); (2) how to address the issues of roaming and handset turnover; and (3) whether the Commission should clarify or modify its RMS methodology for determining ALI accuracy.

II. ANY RULES REGARDING HANDSET-BASED SOLUTIONS MUST BE FLEXIBLE ENOUGH TO ACCOMODATE NEWER TECHNOLOGIES

PCIA agrees with the Commission’s earlier statement that the E911 “rules and their application are intended to be technologically and competitively neutral.”⁹ Therefore, in developing an implementation schedule and accuracy standard for handset-based ALI technologies, the Commission must not inhibit industry’s ability to craft innovative solutions to the problem of locating wireless callers, and must not impede the ability of carriers to choose from among these technologies. Further, whether carriers ultimately decide to implement a handset-based, network-based, or a hybrid solution, the marketplace should decide what is the most efficient and effective technology. PCIA’s carrier members are committed to deploying Phase II technologies as expeditiously as possible, as underscored by the fact that fifty-six percent of wireless phone users cite safety as their primary reason for purchasing a mobile phone.¹⁰

Because both the SnapTrack and the APCO proposals might have a dampening effect on the development of handset-based solutions, the Commission should regard both cautiously. Under SnapTrack’s proposal, carriers would be in compliance with the Commission’s E911 rules

⁹ *E911 Reconsideration Order*, 12 FCC Rcd at 22725.

¹⁰ PCIA 1998 Wireless Market Monitor (Oct. 1998).

if the carrier: (1) begins to deploy location-capable handsets by January 1, 2001; (2) deploys only location-capable handsets after December 31, 2001; and (3) achieves location accuracy of 90 meters using circular error probability (CEP) methodology.¹¹ Given the fact that carriers, under the SnapTrack proposal, would be required to initially deploy location handsets in advance of the October 1, 2001, deadline, the SnapTrack proposal is very ambitious. There remains a cloud of uncertainty – at least amongst wireless carriers – as to whether this timeframe is too ambitious. After all, the carrier that will ultimately pay the penalty for non-compliance.

The APCO proposal has a tendency to lock carriers into using whatever handset-based technologies are currently available, rather than those that will become available in the near future, by setting rigid deadlines for the percentage of ALI-capable handsets that must be deployed on particular dates. In addition, PCIA is concerned that requiring a certain percentage of “all phones in use on the carrier’s system” to be ALI-capable by certain dates might present problems for carriers that serve users with non-service initialized handsets.¹² Specifically, depending upon the handset-based ALI technology deployed by an individual carrier, it might not be technically feasible to provide a PSAP with location information for callers utilizing such non-service initialized handsets. The Commission has recognized this problem in the context of the Phase I provision of call back number and cell-site information, and does not require the provision of such information in the absence of service initialization.¹³ PCIA therefore requests that, to the extent it adopts any part of the APCO proposal, the Commission specifies that where

¹¹ See SnapTrack Comments of February 25, 1999.

¹² Notice at 3.

¹³ See 47 C.F.R. § 20.18(d)(2) (“When the directory number of the handset used to originate a 911 call is not available to the serving carrier, such carrier’s obligations ... extend only to delivering 911 calls and available calling (Continued...)”)

providing ALI for non-service initialized handsets is not technically feasible, carriers are not required to do so.

III. THE COMMISSION SHOULD NOT REQUIRE CARRIERS TO RETROFIT OR REPLACE SUBSCRIBER HANDSETS TO MAKE THEM ALI CAPABLE

In its *Public Notice*, the Commission sought comment on whether it should “impose an obligation upon carriers adopting a handset-based system to offer either to retrofit or to replace subscriber handsets to make them ALI-capable at the carrier’s expense.”¹⁴ PCIA submits that because placing such an obligation on carriers is unnecessary to ensure that most customers are supplied with ALI-capable handsets, and will create significant expenses and administrative difficulties for carriers, the Commission should not adopt such a requirement.

First, such replacement or retrofitting is unnecessary. As numerous commenters have already noted, handset churn and the mass production of ALI-capable handsets will ensure that few subscribers will be using non-ALI capable handsets within a short time after the introduction of the first ALI-capable handsets.¹⁵ Customers replace their phones for a variety of reasons including their desire to convert from analog to digital service, their desire to switch to another service provider, or simply because they want a newer model with better features (*e.g.*, smaller size, lighter weight, increased talk time, enhanced features and functions).¹⁶ Indeed, because

(...Continued)

party information to the designated Public Safety Answering Point”).

¹⁴ Notice at 6.

¹⁵ Notice at 5 n.17.

¹⁶ Dataquest, a market research firm, estimates that while 100 million wireless subscribers were added in

(Continued...)

customers want to be able to use their wireless phones most effectively in emergencies, some will replace their phones to obtain the new ACI capability. The current rate of handset churn can be expected to increase in the future, as manufacturers continue to offer the wireless consumer handset choices.¹⁷ Thus, market mechanisms should ensure that the vast majority of any carrier's customers are using ALI-capable handsets within a relatively short period of time.

In addition, such replacement or retrofitting represents a significant expense and administrative difficulty for wireless carriers. Beyond the expense of replacing or renovating the phones, carriers must first locate customers that have non-compliant handsets. Creating, maintaining, and updating such records will consume a substantial quantity of carrier resources. Carriers should not be required to expend these resources unless the market forces described above prove ineffective.

IV. PCIA CONTINUES TO ENDORSE THE WEIAD PROPOSAL FOR DETERMINING ALI ACCURACY

In the *E911 Reconsideration Order*, Section 20.18(e) was amended to clarify that licensees subject to the section – regardless of the ALI technology utilized – must provide to the designated PSAP “the location of all 911 calls by longitude and latitude such that the accuracy for all calls is 125 meters or less using a Root Mean Square (RMS) methodology.”¹⁸ PCIA

(...Continued)

1998, there were 163 million handsets sold that year. This suggests that 63 million out of 203 million users replaced their phones in 1998, reflecting a replacement rate of about 31%. See Merrill Lynch Global Report on Global Wireless Equipment, “What’s In the Air?,” Mar. 18, 1999.

¹⁷ Dataquest notes that the handset replacement rate has increased in each of the last three years and expects the rate to continue for at least the next four years. *Id.*

¹⁸ 47 C.F.R. § 20.18(e).

continues to believe that the RMS methodology adopted by the Commission should not apply to the ALI accuracy for all E911 calls because a small number of measurements that are very inaccurate will prevent a carrier from complying with the ALI requirement even if the vast majority of ALI measurements are less than 125 meters. Therefore, PCIA supports the WEIAD proposal for determining ALI accuracy which states that: "Phase II location will be attempted on all 911 calls routed toward a Public Safety Answering Point ("PSAP") and will be accurate to within 125 meters in 67% of these cases.¹⁹ PCIA believes that the WEIAD proposal provides a reasonable, well-defined, and measurable goal for the industry.

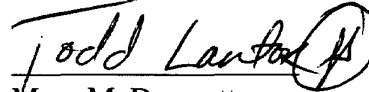
¹⁹ See Letter from James R. Hobson, National Emergency Number Association, acting for WEIAD, CC Dkt. No. 94-102, dated November 25, 1998.

CONCLUSION

In modifying its Phase II rules to allow carriers to meet the E911 ALI requirements using handset-based solutions, the Commission should take three steps. First, in order to encourage the development of creative solutions, the Commission should adopt flexible rules and implementation schedules for handset-based ALI solutions. Second, because it is unnecessary to protect the public safety and would place inordinate burdens on carriers, the Commission should not require the retrofitting or replacement of existing handsets to make them ALI-capable. Third, the Commission should redraft its ALI accuracy requirements in accordance with the *ex parte* letter filed on behalf of the WEIAD earlier in this proceeding.

Respectfully submitted,

PERSONAL COMMUNICATIONS INDUSTRY ASSOCIATION

A handwritten signature in black ink, appearing to read "Todd Lantor", with a stylized flourish at the end.

Mary McDermott

Todd B. Lantor

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